





## **BLUE GREEN CITY**

## **Blue and Green Infrastructure for Sustainable Cities**



## **Action Plan**

Rijeka Development Agency Porin Ltd.

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#### Part I - General information

# Project: BLUE AND GREEN INFRASTRUCTURE FOR SUSTAINABLE CITIES (BLUE GREEN CITY – PGI05836)

Partner organisation: PP7 - RIJEKA DEVELOPMENT AGENCY PORIN ltd. (RDA PORIN)

Other partner organisations involved (if relevant): /

Country: CROATIA

NUTS2 region: HR03 – Jadranska Hrvatska (Adriatic Croatia)

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## Part II - Policy context

The Action Plan aims to impact:		Investment for Growth and Jobs programme
		European Territorial Cooperation programme
	x	Other regional development policy instrument

Policy instrument addressed: **Development Strategy of the City of Rijeka for 2021-2027, goal 4-Preserve Rijeka 2030: Smart, green and clean city; specific goal 4.2 – Green city on the sea, space in the service of citizens** 

## 2.1 Overview of the policy

The City of Rijeka launched a new strategic document, the Development Strategy of the City of Rijeka for 2021-2027, and this document is the new Policy Instrument (PI) addressed by the present action plan. The reason for this change of PI addressed is that, during the application period of the project, PP7 nominated the existing Development Strategy of the City of Rijeka 2016–2020, as the 2021-2027 document was still being drafted.

The initial PI Development Strategy of the City of Rijeka 2016–2020 is no longer valid because, in the meantime, the new version of the document was adopted. The new PI Development Strategy of the City of Rijeka for 2021-2027 is a continuation of the previous efforts, concerned with the preservation of natural ecological assets, such as forests, parks and protected areas. However, the new PI still does not include a Green and Blue Infrastructure (GBI) strategy or the use of the ecosystem services (ESS) approach in planning, which is why the policy instrument was identified for improvement.

During the process of drafting the Development Strategy of the City of Rijeka for 2021–2027, which is a continuation of the 2016-2020 strategy, the municipality organized a 'Maintain Rijeka 2030'

workshop with the participation of local stakeholders. In accordance with the National Development Strategy 2030 and the goals of the European Union for 2021–2027, the new strategic document emphasizes the need to include GBI within the city, as well as the need to maintain such infrastructure to improve the quality of life of citizens and to create more comfortable places to live. These requirements are highlighted in strategic goal 4 of the Development Strategy of the City of Rijeka for 2021-2027 – Preserve Rijeka 2030: Smart, green and clean city adapted to the needs of all citizens, which includes specific goal 4.2 – Green city on the sea, space in the service of citizens. The indicators of goal 4.2 are to increase by 20% the area of parks, playgrounds and rest areas in the city, and to increase by 55% the length of promenades along the sea.

## Why does the policy instrument need to be improved?

GBI can make a significant contribution to the implementation of many regional and local sustainable development goals, especially as regards climate change, disaster risk management, making cities and settlements more inclusive, safe, resilient and sustainable, and social and economic development. A climate risk analysis and assessment of the vulnerability of individual sectors to the effects of climate change conducted in November 2020 identified the following main threats to the City of Rijeka – sea-level rise, heatwaves, floods and longer rainy periods – and their potential impact on five sectors: the coastal belt, human health, the electricity system, water supply, and tourism. The biggest problem with the City of Rijeka is the occupation of the coastal zone by port facilities, economic zones and brownfields, which not only impede the connection between the urban fabric and the coastal landscape, but also the establishment of a coastal green corridor. Another problem is the Rječina river in the city center, which has the potential to be an important green corridor to the canyon in the hinterland but is currently underused because it lacks adequate green space on the riverbank for community use and leisure activities.

While the climate risk analysis identified the critical areas in the city which require the implementation of GBI, the Development Strategy of the City of Rijeka for 2021-2027, is non-spatial, and simply sets target indicators for how much green space should be increased overall within the city, without specifying where it should be created. It is therefore necessary to improve the policy instrument by creating a supplementary document that integrates GBI functionality and ecosystem services in the spatial planning process, and which will serve as the expert basis for amending spatial planning documentation.

#### 2.2 Other relevant policies

- **Spatial Plan of the City of Rijeka** this identifies the green spaces in the urban and periurban area that need to be protected due to the distinct values they possess;
- General Urban Plan of the City of Rijeka this identies the public green spaces that are
  planned or should be planned in the City of Rijeka in order to form a green space network.
  This document contains a map of green areas in the city of Rijeka.

## Part III - Details of the actions envisaged

## **ACTION 1 – GREEN INFRASTRUCTURE DEVELOPMENT STRATEGY**

## 3.1 The background

The Action Plan has been informed by studying the existing local problems regarding GBI implementation, researching best practice examples within other EU countries, the stakeholder workshops held during Phase 1, and by the partnership experience and knowledge gained from PPs online meetings,

The main inspiration comes from the good practice of PP4, Southern Regional Assembly, namely the "Tralee Bay Wetlands Eco and Activity Park", in which an old landfill site was reclaimed, and a damaged habitat restored to a more natural state. This good practice illustrates how a damaged habitat could be transformed to be an important part of a settlement's Blue and Green Infrastructure, and how it can also create win-win benefits for biodiversity, society and the economy, which in turn made the project accepted by the local community.

This good practice provides a possible solution to be explored by PP7, whose biggest problem is the occupation of the coastal zone by port facilities, economic zones and brownfields, which impede the connection between the urban fabric and the coastal landscape, as well as the establishment of a coastal green corridor.

This good practice provided the inspiration for the improvement of PP7's policy instrument, as it is focused on the restoration of damaged habitats, and illustrates, through a practical example, how the factors of environmental progress, assembled with economic and societal benefits, can create win-win outcomes.

## 3.2 Steps

During Phase 1 of the Blue Green City project the following preparatory activities took place:

- Four stakeholder meetings were held once per semester during Phase 1. During the 4<sup>th</sup> stakeholder meeting in July 2021 we organized a debate among representatives from public authorities which revealed different and often conflicting interests, mostly associated with inadequate horizontal and vertical cooperation, as well as a lack of understanding of the concepts of GBI and ecosystem services among the main actors in the field of urban planning at different levels local authorities (policymakers), public and private investors, scientific and professional actors (researchers, academic sector), NGOs, general public, etc. Our insights have been further confirmed by similar experiences among the other project partners.
- The Green Infrastructure Study of the City of Rijeka (2020) provided detailed insight into the existing elements of green infrastructure, their condition and their spatial distribution through an integrated analysis of the natural, historical and anthropogenic factors that influenced their formation. The study helped to raise awareness of green infrastructure and its importance as a starting point for the sustainable development of the City of Rijeka, as well as the need to incorporate its results in spatial planning and strategic documents.

Phase 2 will build on the preparatory work done during Phase 1, by focusing on two activities carried out in parallel.

## Activity 1 – Green Infrastructure Development Strategy document

The Green Infrastructure Development Strategy will be a supplementary document to the policy instrument of the Development Plan of the City of Rijeka 2021–2027. As such it will serve as the expert basis for amending spatial planning documentation.

At the end of 2021, the City of Rijeka put out to tender the service of drafting the Green Infrastructure Development Strategy of the City of Rijeka, and in January 2022 it selected a service provider. The process for drafting the strategy, which includes drafting a strategy proposal, the opportunity to publicly give their suggestions and comments on the proposal, and the final document, will be completed by the end of 2022 and, at this stage, it is expected to be on city agenda by the end of the project.

The Strategy will be based on the previous Study of Green Infrastructure of the City of Rijeka, which analysed spatial factors in order to identify the current provision of green space and the potential for increasing the green infrastructure network. The purpose of the Strategy is therefore to encourage the sustainable development of the city based on the maintenance of existing green spaces and the creation of new ones in the city, and improving their social, ecological and urban-morphological function. The main tasks of the Strategy are:

#### I. TO SET STRATEGIC OBJECTIVES

- Concept of GI definition/redefinition of city identity: define in more detail the elements of the Conceptual Plan established by the Green Infrastructure Study;
- Distinction between existing and planned green elements (wedges, connections, circular zones, point elements);
- List and describe individual green areas or groups of green areas in each of the eight circular zones;
- Definition and schematic cartographic marking of the links between the eight circular zones:
- Priority projects: identify existing projects for maintenance, improvement and new ones for implementation, focusing on: (a) the backbone of the future network of green infrastructure, namely larger natural and mostly protected areas in the hinterland and canyons that transversely penetrate the dense urban fabric and form part of the green belt that protects the urban area from over-expansion; and (b) connection of the urban fabric with the coastal landscape, i.e. with the sea, as well as the establishment of the coastal green corridor;
- Implementation of measures in sectoral tools and policies: the Green Infrastructure Development Strategy will be a strategic tool that defines the vision for development, develops a detailed plan, and prescribes a set of strategic and detailed measures for the implementation of the vision and the plan. Measures may include a set of concrete strategic projects and initiatives, ways of implementation and connection with various sectoral tools in which the key role is played by spatial planning, i.e. the strategy will be an important professional basis for making changes to spatial planning documentation.

#### II. SWOT ANALYSIS IN RELATION TO GREEN INFRASTRUCTURE

#### III. STRATEGIC DEVELOPMENT MEASURES of GI

- Watercourses
- Coast
- Forests and agricultural land
- Public green areas
- Industrial and economic zones

#### IV. DETAILED MICRO-LEVEL MEASURES FOR PRIORITY AREAS

It is necessary to improve the Rječina watercourse and canyon. The lower canyon part should come to life as the backbone of the future network of green infrastructure of the City of Rijeka, which connects the green, natural hinterland with the sea and the historical part of the city where the most important gravitational and focal points in the city are located (historical parks and cemetery parks, squares, public spaces).

#### V. INTEGRATION OF THE STRATEGY IN SECTOR TOOLS AND POLICIES

During the process of drafting the Strategy, it is necessary to establish cooperation with the local community and public administration. Involvement of stakeholders relevant to the development and management of the subject area is very important, so it is necessary to establish a working group that would work closely together problems of individual spaces as well as the goals of their development.

Hence the important main tasks, especially pointed out in points I. and IV., as well as the above-mentioned example of PP4's good practice, point to the need to improve the system of open / green areas of the city, through the improvement of existing, and planning of new open / green areas and their networking and development of various functions.

#### The important focus is on:

- (a) the backbone of the future network of green infrastructure, namely larger natural and mostly protected areas in the hinterland and canyons that transversely penetrate the dense urban fabric and form part of the green belt that protects the urban area from over-expansion; and
- (b) connection of the urban fabric with the coastal landscape, i.e. with the sea, as well as the establishment of the coastal green corridor.

Occupation of the coastal zone by port facilities, economic zones and brownfields situated in the canyon of river Rječina impede the connection between the urban fabric and the coastal landscape, as well as the establishment of a coastal green corridor. This will raise the values of open spaces and have a positive impact on the appearance of the city and its identity.

This is compliant also with the European Union's "Green Infrastructure - Strengthening European Natural Capital" - Green Infrastructure Strategy, that emphasizes the importance of green infrastructure in protecting Europe's natural capital and the need for its integration into sectoral policies and financial EU instruments.

### Activity 2 – Strengthening cooperation between key stakeholders

In accordance with the description in the previous point, activity 1, the Green Infrastructure Development Strategy is being drafted, which will set out in more detail the goals for the improvement of green infrastructure, and that is why this document complements the PI.

The expected change is a change in the strategic focus of the policy instrument (type 3), which will be achieved by monitoring the set indicators that want to increase by 20% the area of parks, playgrounds and rest areas in the city, and to increase by 55% the length of promenades along the sea.

Strengthening cooperation between key stakeholders is perceived to be the first important step in order to foster dialogue within the field of urban planning, to develop a plan for GBI implementation, to bring changes to local policy instruments, and to provide a solid foundation for making GBI implementation possible. The goal of this activity is therefore to connect and engage different stakeholders by means of participatory (professional and general public), interdisciplinary (science and professionals from different fields) and cross-sectoral cooperation, in order to foster awareness among the community of the value and benefits of green infrastructure and ecosystem services. This will be implemented through three sub-activities:

- A 2.1 Establish a Green Infrastructure Development Strategy working group to foster cross-sectoral cooperation between public bodies and non-governmental stakeholders, including community groups, for multi-stakeholder governance. The working group will meet four times during Phase 2;
- A 2.2 Run training courses using the resources prepared by the Advisory Partner: A 2.2.1 Scenario Planning for Climate Change Adaptation Strategies; A 2.2.2 Green and Blue Infrastructure; and A 2.2.3 Valuation of Ecosystem Services;
- A 2.3 Foster dialogue through a participatory workshop in order to collect ideas related
  to the improvement of the existing green spaces and the establishment of new ones. The
  City of Rijeka has published a call for project proposals for the Rijeka Local Partnership
  Programme for 2022 intended for groups of citizens, associations and local committees to
  submit their proposals for minor interventions in communal infrastructure in public areas
  (parks, playgrounds, trees, promenades, green areas, removal of small illegal landfills of
  non-hazardous municipal waste, etc.) as projects in the implementation of which they will
  directly and collectively participate.

#### 3.3 Players involved

The players to be involved in Phase 2 will be:

#### Local authorities:

- City Administration Department for Development, Urbanism, Ecology and Land Management – Directorate for Land Management, Directorate for Development, Urbanism and Ecology, Directorate for Integrated Territorial Investments;
- City Administration Department for Communal System Directorate of Planning, Development and Construction, Directorate of Joint Communal Activities;
- City Administration Department for Culture Program Directorate, Directorate for the Protection and Preservation of Cultural Heritage.

## Regional authorities:

 Primorje and Gorski Kotar County (Department for Physical Planning, Construction and Environmental Protection).

#### Public institutions:

- Public Institution Nature;
- Natural History Museum Rijeka.

#### Local stakeholders:

- Rijeka Development Agency Porin Ltd (PP7);
- Private enterprises in the field of ecology and environmental protection;
- University of Rijeka Faculty of Civil Engineering;
- General public.

#### 3.4 Timeframe

	M1	M2	М3	M4	M5	M6	M7	M8	M9	M10	M11	M12
A 1												
A 2.1												
A 2.2.1												
A 2.2.2												
A 2.2.3												
A 2.3												

## 3.5 Costs

Costs for all activities are estimated to be €25,500. This includes staff costs (€7000 for staff costs of two people from the City of Rijeka, €1500 for one person from PP7 to monitor the activities, €16,000 for external expertise to draft the Strategy) and €1000 to cover the costs of organizing and running the training courses and participatory workshop.

## 3.6 Funding sources

All activities in Phase 2 will be met from the City of Rijeka budget.

## 3.7 Performance indicators

- A 1 Green Infrastructure Development Strategy document
- A 2.1 Minutes of the working group meetings
- A 2.2 Signature sheets and participant feedback from the training courses
- A 2.3 Signature sheets and participant feedback from the participatory workshop

Date: 31/01/2022	
Signature:	
Stamp of the organisation (if available):	